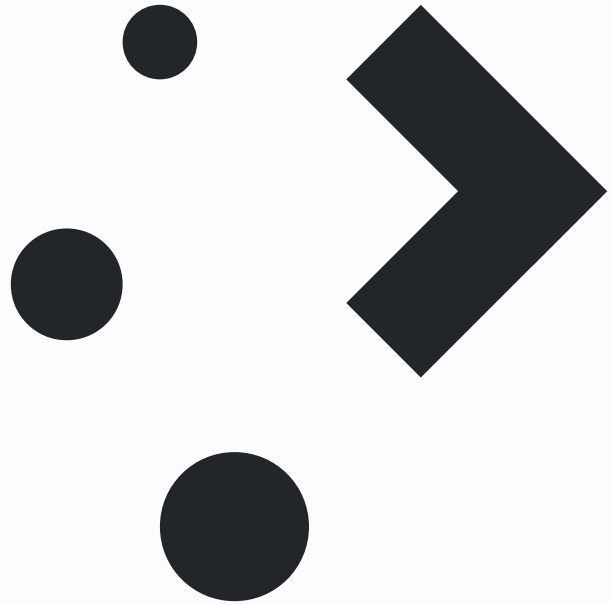
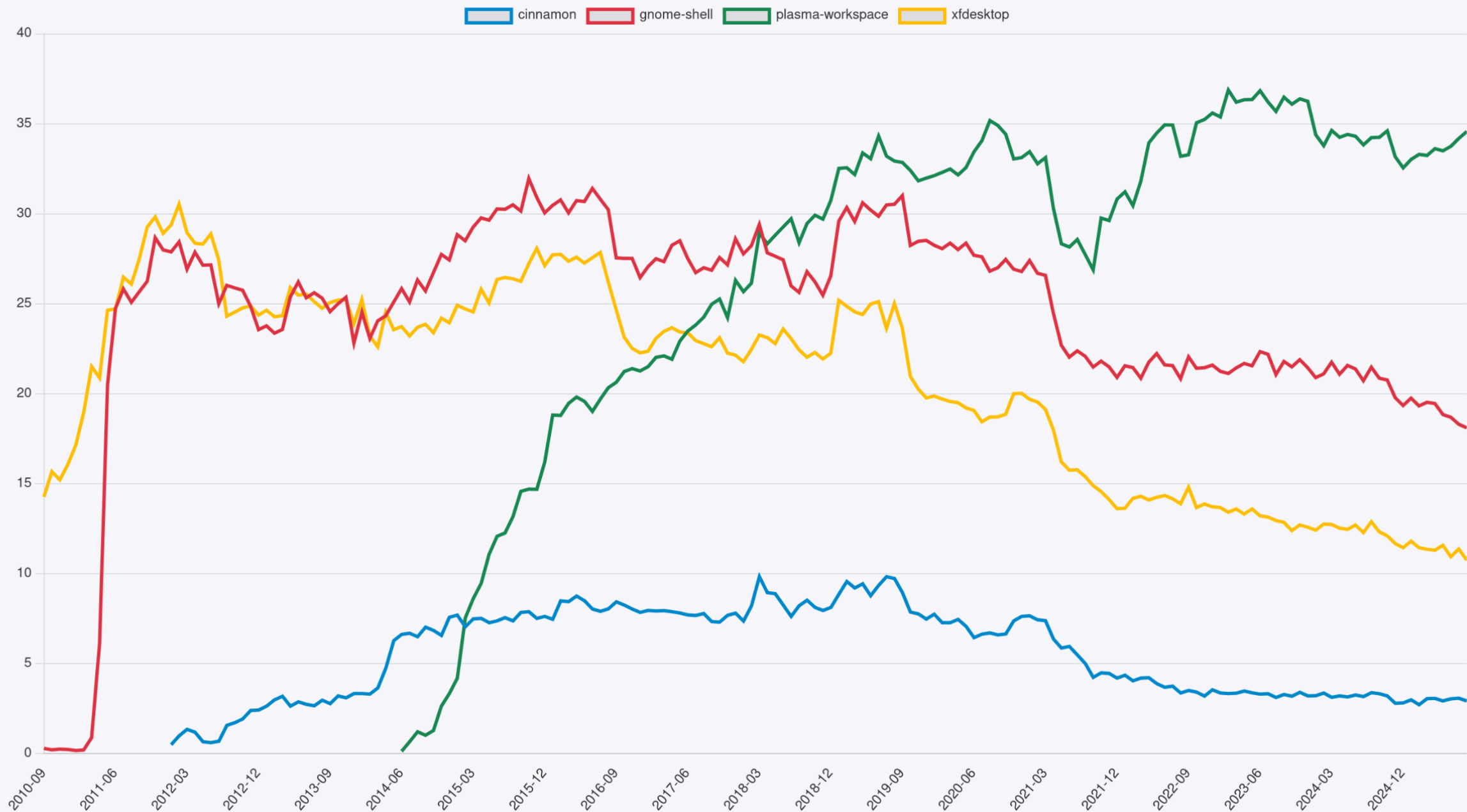


Plasma: Lessons learned

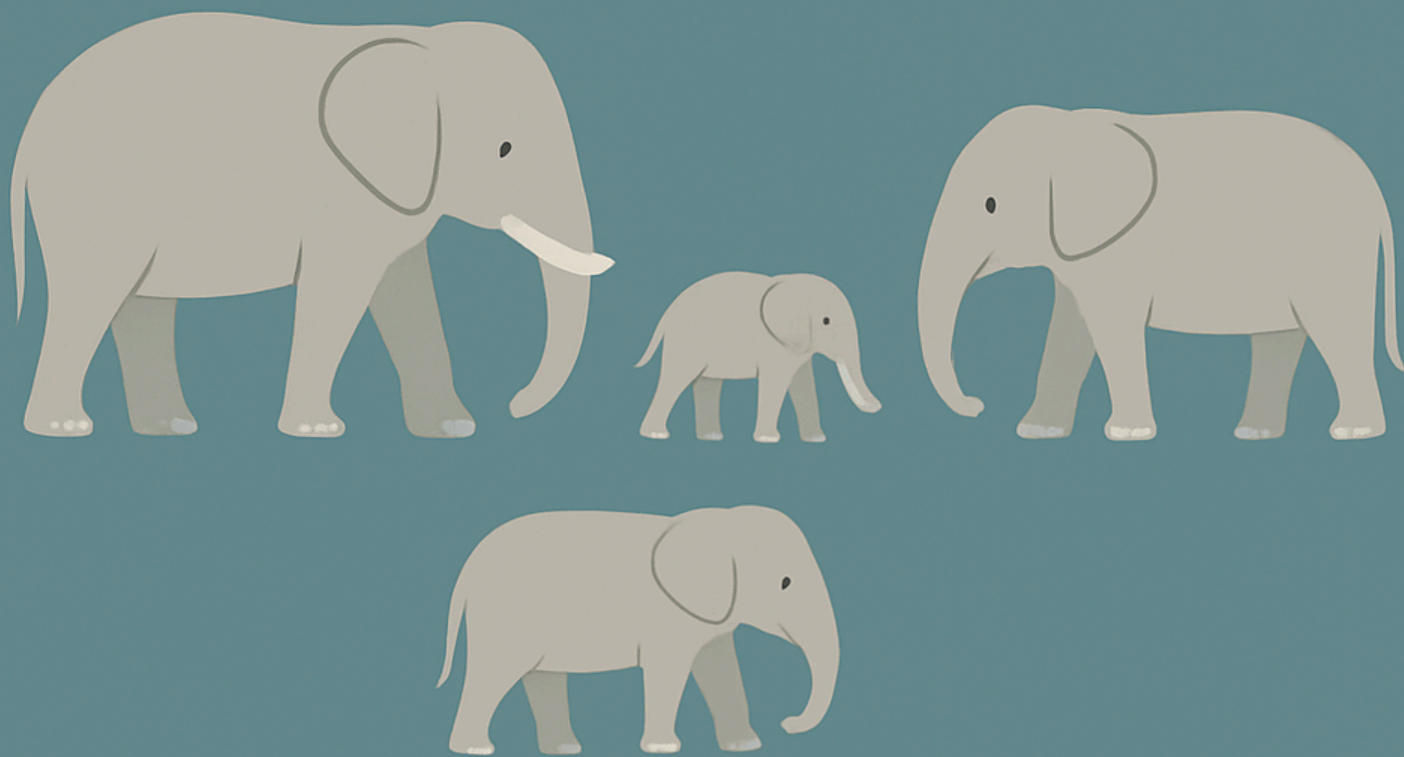


**What's our
greatest asset?**



Overview

The elephant in the room



**Will you ever regret taking your
time?**

Will you ever regret rushing?

Lessons

- People still talk about KDE 4.0 17 years later!
- Winning people back is hard

Lessons

- If you can split things up, split it
- Good goals are about achieving lots, not doing lots of things

Baloo's First release

Baloo

- Huge upgrade from Nepomuk
- Massively lighter, night and day difference in the right direction
- To encourage adoption the first release had no user UI to disable it
- Relatively, amazing.

Lessons

- Don't be *over* confident!
- Once a reputation is set, it's very hard to shake

Changing our release cycle

Changing our release cycle

- Used to have a feature freeze, string freeze, UI freeze, alpha1, beta1, beta2, beta3, RC1, RC2 ...
Release
- 6 month cycle
- Pivoted to a 3 month cycle with no feature freeze, only one beta 2 weeks before

It didn't work out.

Lessons

- If a policy isn't working, the extreme opposite isn't the answer

The art of releases

Lifecycle of a patch

- In an merge request (1-10 people)
- On master (10-100 people)
- In a beta (100-1000 people)
- Available for users (1,000 - 100,000 people)
- On by default (100,000 - 10,000,000 people)

Understanding our userbase

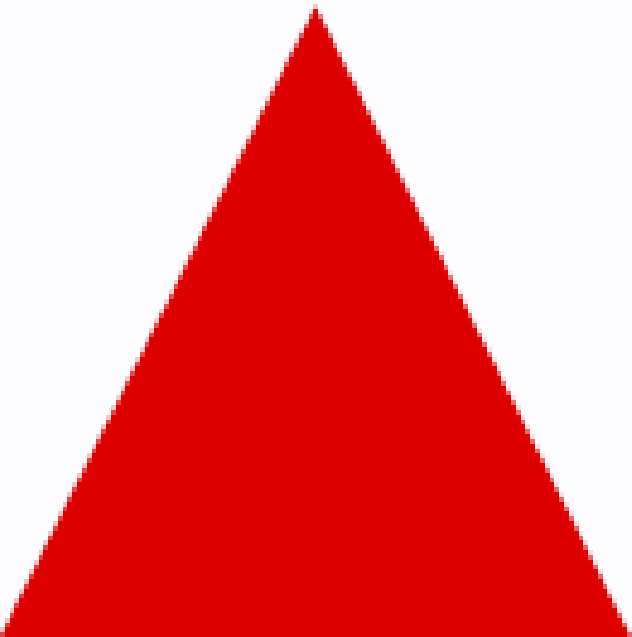
The casheW.



Why did it fail?

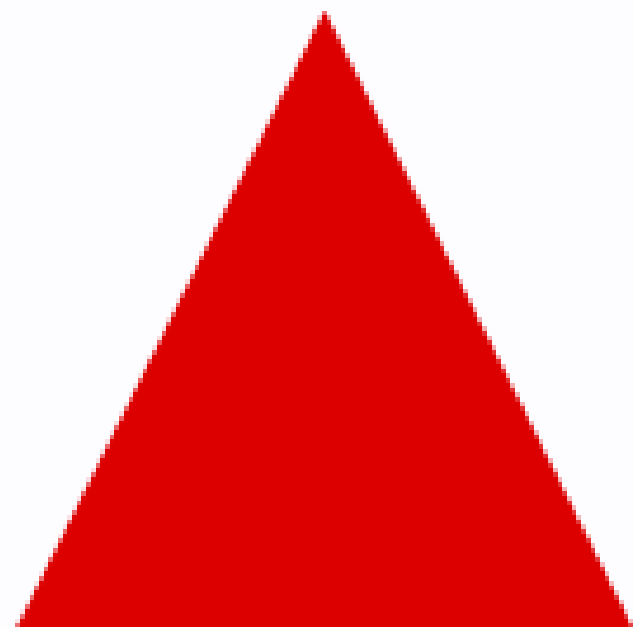
simple

complex



simple

complex



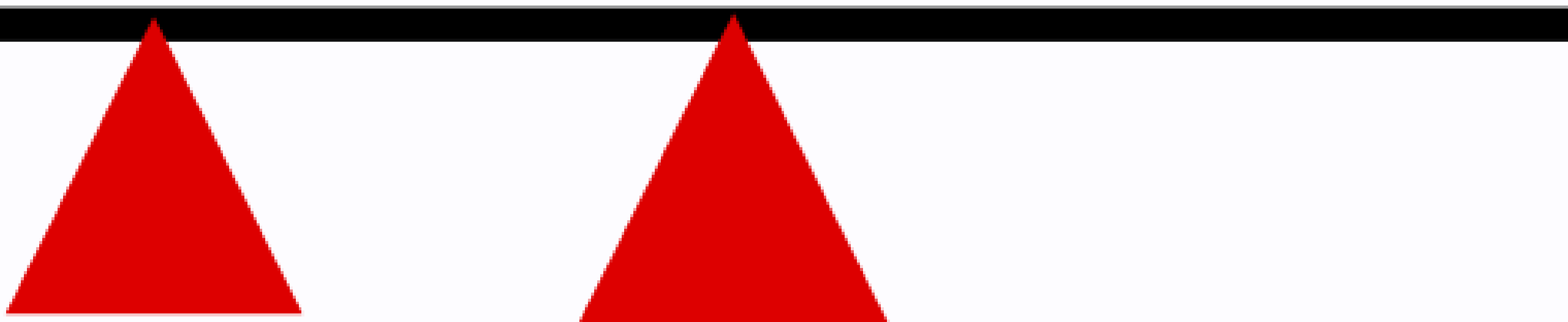
simple

complex



simple

complex



Understanding our users



reddit

phoronix



 YouTube

is this our
userbase?



**The
Reddit/Phoronix/Bugzilla
Crowd Representative of our
userbase?**

No

**The
Reddit/Phoronix/Bugzilla
Crowd Representative of our
userbase?**

But...

They are our ambassadors

**The Commit Digest / "This
week in KDE" are so
important**

**Our biggest success has
come from our core product**

Lessons

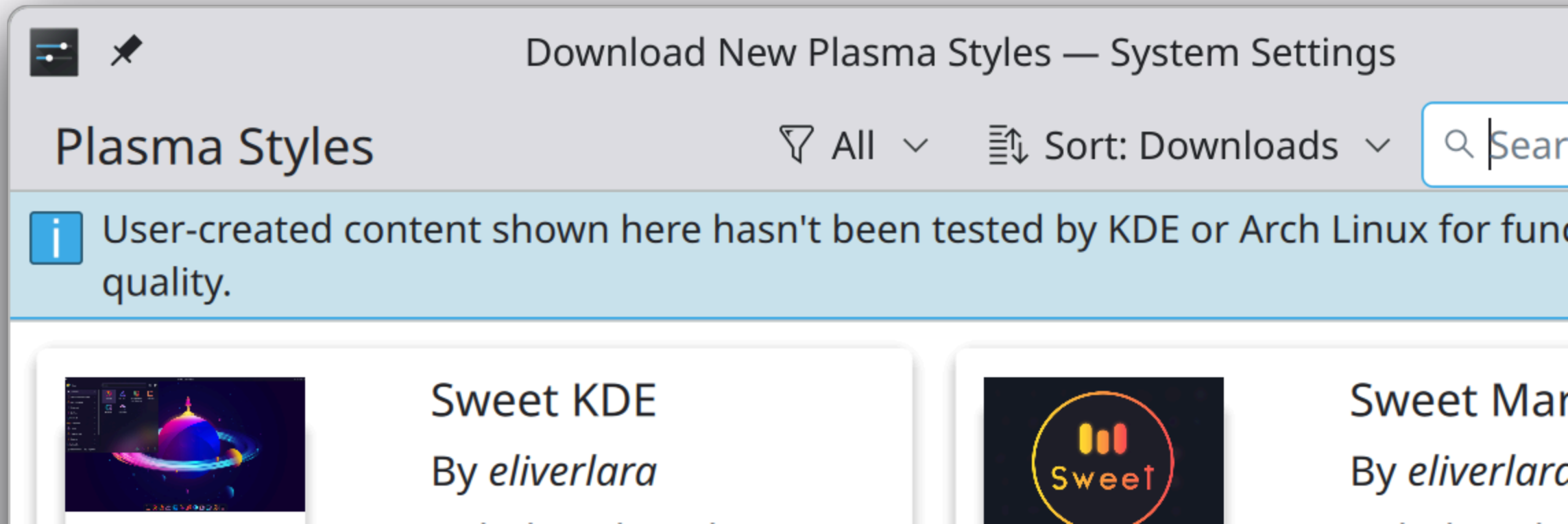
- Don't go chasing bigger markets at the expense of the current one
- Focus on what makes you different in a good way

Code problems

**Don't half-solve something:
Theming**

Theming when it works

There are literally thousands of themes on the Plasma store



Theming when it works

- We had tooling
- We had (some!) documentation
- We had a distribution process

Theming when it fails

The login screen

- Loaded QML files that could be user-replaced

The login screen - why was it problematic

- It held us back implementing features
- Causes the code to be strewn around

The login screen - why it didn't work

- Lots of tiny details are hard to do right.
 - accessibility
 - keyboard navigation
 - screen size handling
- Limited documentation
- Most people want the default with some settings

Lessons

- Balance opportunities and costs
- If you are going to do something, go all in and make it work

Code quality

Quick-fire Observations / Practical advice

**Extra time during review will
pay for itself**

**Optimise for
simplicity/maintainability
above literally everything
else**

Observations

- Some workarounds are inevitable
- Not all workarounds cause the same tech debt

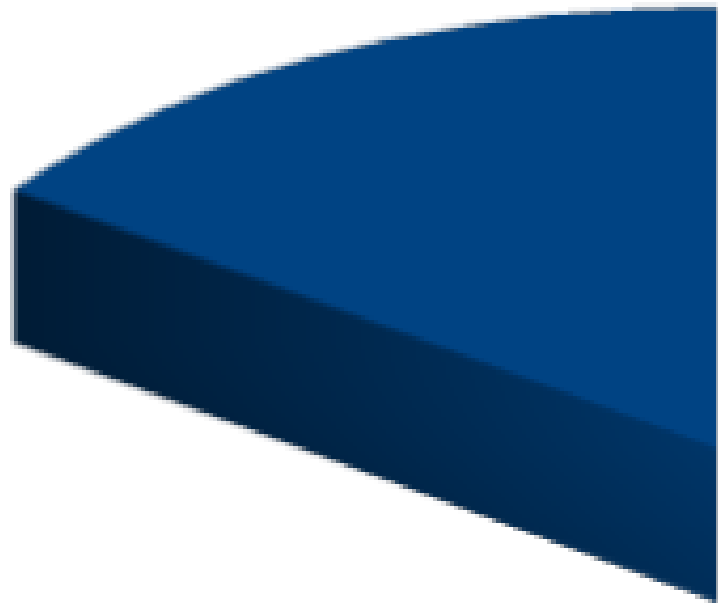
**The one policy that changed
everything!**

**"If you're working around a
Qt bug, you must file a
decent bug report upstream
and link to that bug report"**

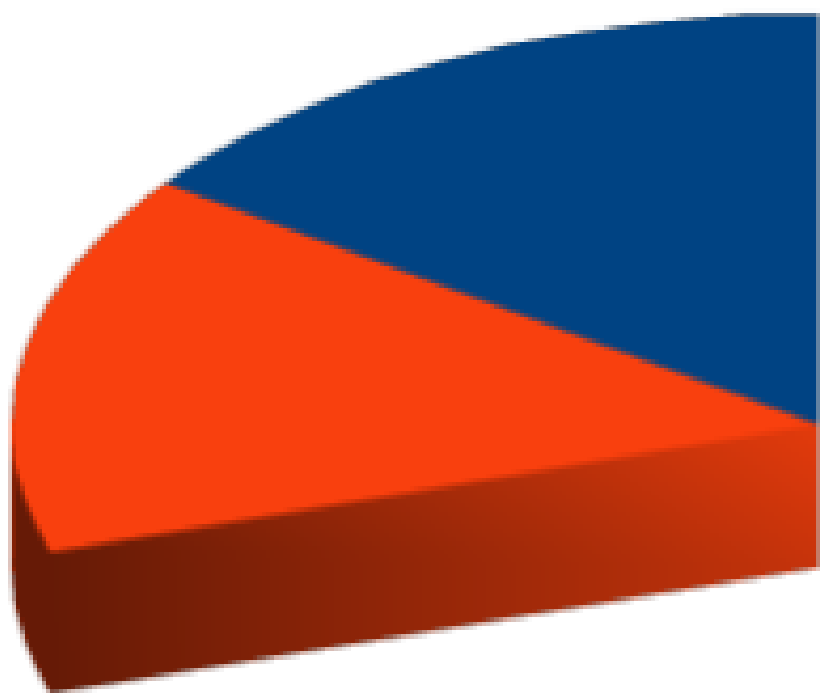
Why it's great

```
// Workaround for https://bugreports.qt.io/browse/QTBUG-106118  
Binding on visible {  
    delayed: true  
    restoreMode: Binding.RestoreBindingOrValue  
    value: controlRoot.size < 1.0 && controlRoot.size > 0 && controlRo  
}
```

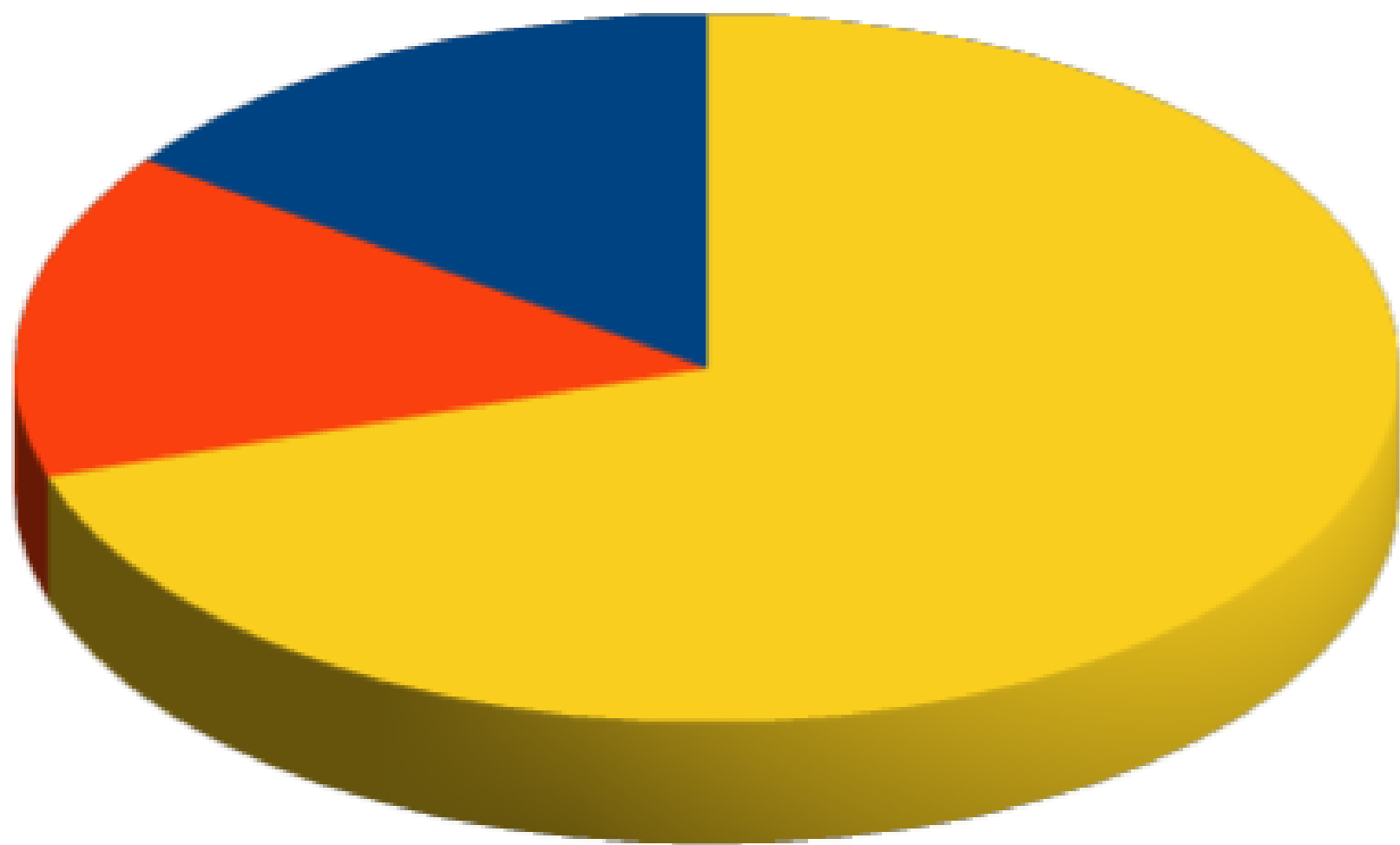
The surprise observation



■ Ticket is created on Jira



- Ticket is created on Jira
- A patch is submitted to Gerrit



- Ticket is created on Jira
- A patch is submitted to Gerrit
- It wasn't a bug upstream after all, here's a better patch

Bugs

Sentry is a gamechanger

Issues ?

Set as Default

Prioritized 99+ For Review 99+ Regressed Escalating 7 Archived 5

KDE David Edmundson

Issues

Projects

Explore ^

- Profiles
- Replays
- Discover

Insights ^

- Frontend
- Backend
- Mobile
- AI
- Crons
- Uptime

User Feedback

Alerts

Dashboards

Releases

Stats

Settings

Help

What's new

Qt plasma-workspace All Envs 7D Custom Search is unresolved issue.priority is high or medium release.version is 6.4.4 Events

<input type="checkbox"/> Issue	Last Seen	Age	Trend	24h	7d	Events	Users	Priority	Assignee	
<div>QQuickStackView::replace</div> <div>Segmentation fault</div> <div>Qt PLASMA-WORKSPACE-2TV5 Unhandled</div>	5min ago	1wk	<div><div></div><div>54</div><div>Ongoing</div></div>	1k	1k	1k / 1k	0	0	0 / 0	<div><div></div><div></div></div>
<div>QQmlListModel::data</div> <div>Segmentation fault</div> <div>Qt PLASMA-WORKSPACE-2CY8 Unhandled Bugzilla#506843</div>	8min ago	4mo	<div><div></div><div>9</div><div>Ongoing</div></div>	797	797	797 / 797	0	0	0 / 0	<div><div></div><div></div></div>
<div>?</div> <div>Segmentation fault</div> <div>Qt PLASMA-WORKSPACE-2TXA Unhandled</div>	2hr ago	2mo	<div><div></div><div>3</div><div>Ongoing</div></div>	320	320	320 / 320	0	0	0 / 0	<div><div></div><div></div></div>
<div>raise</div> <div>Aborted</div> <div>Qt PLASMA-WORKSPACE-2220 Unhandled 1</div>	14hr ago	4mo	<div><div></div><div>2</div><div>Ongoing</div></div>	155	155	155 / 155	0	0	0 / 0	<div><div></div><div></div></div>
<div>QV4::QObjectWrapper::getQmlProperty</div> <div>Illegal instruction</div> <div>Qt PLASMA-WORKSPACE-2VDG Unhandled</div>	4d ago	4d	<div><div></div><div></div><div>Escalating</div></div>	93	93	93 / 93	0	0	0 / 0	<div><div></div><div></div></div>
<div>__pthread_kill_implementation</div> <div>Aborted</div> <div>Qt PLASMA-WORKSPACE-25AN Unhandled</div>	8hr ago	6mo	<div><div></div><div>2</div><div>Ongoing</div></div>	64	64	64 / 64	0	0	0 / 0	<div><div></div><div></div></div>
<div>QJSEngine::handle</div> <div>Segmentation fault</div> <div>Qt PLASMA-WORKSPACE-2V4D Unhandled</div>	17min ago	6d	<div><div></div><div>8</div><div>New</div></div>	55	55	55 / 55	0	0	0 / 0	<div><div></div><div></div></div>
<div>?</div> <div>Segmentation fault</div> <div>Qt PLASMA-WORKSPACE-2QWX Unhandled</div>	6hr ago	3wk	<div><div></div><div>1</div><div>Ongoing</div></div>	53	53	53 / 53	0	0	0 / 0	<div><div></div><div></div></div>

The surprise observation

It doesn't match bugzilla at all.

Issue	Sentry	Bugzilla
QQuickStackView::replace	1100 hits	1 ticket
libexiv ABI issue	36 hits	4 tickets

Why Sentry Works

- Prioritise what's important
- Automate what we can
- Focus on what's new

How we've got better at bugzilla

- Prioritise what's important
- Automate what we can
- Focus on what's new

**What's the current
trajectory within Plasma?**

What's our current trajectory?

- We're not adding more gimmicks
- We're making our existing features better
- Focussing on weak points

Questoins